North Richmond Wastewater Treatment Plant June Pollution Monitoring Summary



EPL 190

Summary period: 01-06-2020 to 30-06-2020 Licensee: Sydney Water Corporation

PO Box 399

Date published: 20-07-2020 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

Date obtained: 08-07-2020

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | | |
|--|--|---------|----|----|-----|--|--|--|
| pollutant | unit of sampling measure frequency 3DGM limit 3DGM Actual within limits | | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | | |
| total suspended solids | mg/L | | | | | | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|----------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | _ | - | 361 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | - | - | 5.9 |
| cyanide | ug/L | monthly | 1 | - | - | <5 |
| diazinon | ug/L | monthly | 1 | _ | - | <0.1 |
| iron | ug/L | monthly | 1 | _ | - | 141 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.82 | 1.21 | 1.57 |
| nitrogen (total) | mg/L | every 6 days | 5 | 6.79 | 7.3 | 7.9 |
| phosphorus (total) | mg/L | every 6 days | 5 | 0.31 | 0.37 | 0.48 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | 4 |
| zinc | ug/L | monthly | 1 | - | _ | 34 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | _ | _ | 100 |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 1 | 2 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |

Average and percentile limits are only applied annually for routine monitoring data in Table 2

North Richmond Wastewater Treatment Plant May Pollution Monitoring Summary



EPL 190

Summary period: 01-05-2020 to 31-05-2020 Licensee: Sydney Water Corporation

Date obtained: 09-06-2020Á PO Box 399

Date published: 1Ï -06-2020Á PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | |
|--|--|---------|----|----|-----|--|--|
| pollutant | unit of sampling measure sampling frequency 3DGM limit 3DGM Actual within limits | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | |
| total suspended solids | mg/L | monthly | 40 | 2 | yes | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point descrip facilities | tion: Downstrea | m of the weir | from the disinfection | | | |
|--|--------------------------|-----------------------|-------------------|-----------------------|----------------|----------------|--|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result | |
| aluminium | ug/L | monthly | 1 | _ | _ | 291 | |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 | |
| copper | ug/L | monthly | 1 | - | _ | 5 | |
| cyanide | ug/L | monthly | 1 | - | _ | <5 | |
| diazinon | ug/L | monthly | 1 | - | _ | <0.1 | |
| iron | ug/L | monthly | 1 | - | _ | 15 | |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.74 | 0.96 | 1.24 | |
| nitrogen (total) | mg/L | every 6 days | 5 | 5.76 | 6.17 | 6.51 | |
| phosphorus (total) | mg/L | every 6 days | 5 | 0.25 | 0.37 | 0.68 | |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | 2 | |
| zinc | ug/L | monthly | 1 | _ | _ | 29 | |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | - | _ | 100 |
| faecal coliforms | CFU/100mL | every 6 days | 6 | <1 | 2 | 6 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | _ | _ | <30 |

North Richmond Wastewater Treatment Plant April Pollution Monitoring Summary



EPL 190

Summary period: 01-04-2020 to 30-04-2020 Licensee: Sydney Water Corporation

Date obtained: 07-05-2020 PO Box 399

Date published: 15-05-2020 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | | |
|--|--|-----------------------|----|----|-----|--|--|--|
| pollutant | unit of sampling measure frequency 3DGM limit 3DGM Actual within limits | | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | | |
| total suspended solids | mg/L | mg/L monthly 40 3 yes | | | | | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point descrip facilities | Point description: Downstream of the weir from the disinfection acilities | | | | | |
|--|--------------------------|---|-------------------|-------------------|----------------|----------------|--|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result | |
| aluminium | ug/L | monthly | 1 | - | - | 315 | |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 | |
| copper | ug/L | monthly | 1 | - | - | 3.3 | |
| cyanide | ug/L | monthly | 1 | _ | - | <5 | |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 | |
| iron | ug/L | monthly | 1 | - | - | 30 | |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.65 | 0.89 | 1.06 | |
| nitrogen (total) | mg/L | every 6 days | 5 | 4.61 | 5.6 | 6.02 | |
| phosphorus (total) | mg/L | every 6 days | 5 | 0.27 | 0.38 | 0.48 | |
| total suspended solids | mg/L | every 6 days | 5 | 3 | 3 | 3 | |
| zinc | ug/L | monthly | 1 | - | - | 24 | |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | - | _ | 100 |
| faecal coliforms | CFU/100mL | every 6 days | 5 | 1 | 8 | 17 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | _ | <30 |

Average and percentile limits are only applied annually for routine monitoring data in Table 2

North Richmond Wastewater Treatment Plant March Pollution Monitoring Summary



EPL 190

Summary period: 01-03-2020 to 31-03-2020 Licensee: Sydney Water Corporation

Date obtained: 07-04-2020 PO Box 399

Date published: 17-04-2020 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | | |
|--|--|---------|----|----|-----|--|--|--|
| pollutant | unit of sampling measure frequency 3DGM limit 3DGM Actual within limits | | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | | |
| total suspended solids | mg/L | | | | | | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 308 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 6 | <2 | <2 | 2 |
| copper | ug/L | monthly | 1 | - | - | 3.7 |
| cyanide | ug/L | monthly | 1 | - | - | <5 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| iron | ug/L | monthly | 1 | - | - | 22 |
| nitrogen (ammonia) | mg/L | every 6 days | 6 | 0.58 | 0.79 | 0.97 |
| nitrogen (total) | mg/L | every 6 days | 6 | 5.31 | 6.13 | 7.6 |
| phosphorus (total) | mg/L | every 6 days | 6 | 0.2 | 0.4 | 0.6 |
| total suspended solids | mg/L | every 6 days | 6 | <2 | 3 | 4 |
| zinc | ug/L | monthly | 1 | - | _ | 20 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | - | _ | 100 |
| faecal coliforms | CFU/100mL | every 6 days | 5 | 6 | 94 | 380 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | _ | <30 |

North Richmond Wastewater Treatment Plant February Pollution Monitoring Summary



EPL 190

Summary period: 01-02-2020 to 29-02-2020 Licensee: Sydney Water Corporation

Date obtained: 18-03-2020 PO Box 399

Date published: 27-03-2020 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | |
|--|--|---------|----|----|-----|--|--|
| pollutant | unit of sampling measure frequency 3DGM limit 3DGM Actual within limits | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | |
| total suspended solids | mg/L | monthly | 40 | 3 | yes | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 277 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 4 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | _ | - | 3.8 |
| cyanide | ug/L | monthly | 1 | _ | - | <5 |
| diazinon | ug/L | monthly | 1 | _ | - | <0.1 |
| iron | ug/L | monthly | 1 | _ | - | 28 |
| nitrogen (ammonia) | mg/L | every 6 days | 4 | 0.62 | 0.75 | 0.88 |
| nitrogen (total) | mg/L | every 6 days | 4 | 6.01 | 6.88 | 8.72 |
| phosphorus (total) | mg/L | every 6 days | 4 | 0.45 | 0.47 | 0.49 |
| total suspended solids | mg/L | every 6 days | 4 | <2 | 4 | 7 |
| zinc | ug/L | monthly | 1 | - | - | 16 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | | | |
|--|--|--------------|---|--------------|-----|-----|--|--|
| pollutant | unit of measure | | | | | | | |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 100 | | |
| faecal coliforms | CFU/100mL | every 6 days | 5 | 45 | 148 | 470 | | |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | _ | <30 | | |

Average and percentile limits are only applied annually for routine monitoring data in Table 2

North Richmond Wastewater Treatment Plant January Pollution Monitoring Summary



EPL 190

Summary period: 01-01-2020 to 31-01-2020 Licensee: Sydney Water Corporation

Date obtained: 07-02-2020 PO Box 399

Date published: 14-02-2020 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | |
|--|--|---------|----|---|-----|--|--|
| pollutant | unit of sampling measure frequency 3DGM limit 3DGM Actual within limits | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | 2 | yes | | |
| total suspended solids | mg/L | monthly | 40 | 6 | yes | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|----------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | _ | 278 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 6 | <2 | <2 | 3 |
| copper | ug/L | monthly | 1 | - | _ | 4.2 |
| cyanide | ug/L | monthly | 1 | - | - | <5 |
| diazinon | ug/L | monthly | 1 | _ | - | <0.1 |
| iron | ug/L | monthly | 1 | _ | - | 27 |
| nitrogen (ammonia) | mg/L | every 6 days | 6 | 0.76 | 0.94 | 1.36 |
| nitrogen (total) | mg/L | every 6 days | 6 | 3.93 | 5.16 | 6.57 |
| phosphorus (total) | mg/L | every 6 days | 6 | 0.31 | 0.44 | 0.5 |
| total suspended solids | mg/L | every 6 days | 6 | 3 | 5 | 8 |
| zinc | ug/L | monthly | 1 | - | _ | 28 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | | |
|--|--|--------------|---|---|-----|-----|--|
| pollutant | unit of sampling number of minimum mean maximum measure frequency samples result result result | | | | | | |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | - | _ | 100 | |
| faecal coliforms | CFU/100mL | every 6 days | 5 | 5 | 116 | 530 | |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | _ | <30 | |

North Richmond Wastewater Treatment Plant December Pollution Monitoring Summary



EPL 190

Summary period: 01-12-2019 to 31-12-2019 Licensee: Sydney Water Corporation

Date obtained: 02-01-2020 PO Box 399

Date published: 10-01-2020 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | |
|--|--|---------|----|----|-----|--|--|
| pollutant | unit of sampling measure sampling frequency 3DGM limit 3DGM Actual within limits | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | |
| total suspended solids | mg/L | monthly | 40 | 3 | yes | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 119 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | _ | _ | 4.2 |
| cyanide | ug/L | monthly | 1 | _ | _ | <5 |
| diazinon | ug/L | monthly | 1 | _ | _ | <0.1 |
| iron | ug/L | monthly | 1 | _ | _ | 18 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.27 | 0.43 | 0.77 |
| nitrogen (total) | mg/L | every 6 days | 5 | 5.51 | 6.53 | 6.87 |
| phosphorus (total) | mg/L | every 6 days | 5 | 0.15 | 0.19 | 0.23 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | 3 |
| zinc | ug/L | monthly | 1 | - | _ | 23 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | | |
|--|--|--------------|---|---|---|-----|--|
| pollutant | unit of sampling number of minimum mean maximum measure frequency samples result result result | | | | | | |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 100 | |
| faecal coliforms | CFU/100mL | every 6 days | 5 | 1 | 6 | 9 | |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 | |

Average and percentile limits are only applied annually for routine monitoring data in Table 2

North Richmond Wastewater Treatment Plant November Pollution Monitoring Summary



EPL 190

Summary period: 01-11-2019 to 30-11-2019 Licensee: Sydney Water Corporation

Date obtained: 04-12-2019 PO Box 399

Date published: 12-12-2019 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | |
|--|--|---------|----|----|-----|--|--|
| pollutant | unit of sampling measure frequency 3DGM limit 3DGM Actual within limits | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | |
| total suspended solids | mg/L | monthly | 40 | <2 | yes | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | _ | _ | 164 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | _ | _ | 4.1 |
| cyanide | ug/L | monthly | 1 | _ | _ | <5 |
| diazinon | ug/L | monthly | 1 | - | _ | <0.1 |
| iron | ug/L | monthly | 1 | - | _ | 19 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.66 | 0.83 | 0.99 |
| nitrogen (total) | mg/L | every 6 days | 5 | 5.66 | 6.56 | 7.17 |
| phosphorus (total) | mg/L | every 6 days | 5 | 0.11 | 0.32 | 0.78 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | 2 |
| zinc | ua/L | monthly | 1 | _ | _ | 24 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | _ | _ | 100 |
| faecal coliforms | CFU/100mL | every 6 days | 5 | 2 | 11 | 33 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | _ | _ | <30 |

Average and percentile limits are only applied annually for routine monitoring data in Table 2

North Richmond Wastewater Treatment Plant October Pollution Monitoring Summary



EPL 190

Summary period: 01-10-2019 to 31-10-2019 Licensee: Sydney Water Corporation

Date obtained: 12-11-2019 PO Box 399

Date published: 22-11-2019 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | |
|--|--|--------------------|------------|-------------|---------------|--|--|
| pollutant | unit of measure | sampling frequency | 3DGM limit | 3DGM Actual | within limits | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | |
| total suspended solids | mg/L | monthly | 40 | <2 | yes | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | _ | - | 131 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | _ | - | 4.2 |
| cyanide | ug/L | monthly | 1 | _ | - | <5 |
| diazinon | ug/L | monthly | 1 | _ | - | <0.1 |
| iron | ug/L | monthly | 1 | _ | - | 13 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.48 | 0.6 | 0.76 |
| nitrogen (total) | mg/L | every 6 days | 5 | 4.72 | 5.03 | 5.74 |
| phosphorus (total) | mg/L | every 6 days | 5 | 0.1 | 0.2 | 0.32 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| zinc | ug/L | monthly | 1 | - | - | 25 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|----------------|--|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result | |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | - | _ | 100 | |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 13 | 45 | |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 | |

Average and percentile limits are only applied annually for routine monitoring data in Table 2

North Richmond Wastewater Treatment Plant September Pollution Monitoring Summary



EPL 190

Summary period: 01-09-2019 to 30-09-2019 Licensee: Sydney Water Corporation

Date obtained: 04-10-2019 PO Box 399

Date published: 15-10-2019 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | |
|--|--|---------|----|----|-----|--|--|
| pollutant | unit of sampling measure frequency 3DGM limit 3DGM Actual within limits | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | |
| total suspended solids | mg/L | monthly | 40 | <2 | yes | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|----------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | _ | 135 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | _ | _ | 2.9 |
| cyanide | ug/L | monthly | 1 | _ | _ | <5 |
| diazinon | ug/L | monthly | 1 | _ | _ | <0.1 |
| iron | ug/L | monthly | 1 | _ | _ | 17 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.51 | 0.63 | 0.73 |
| nitrogen (total) | mg/L | every 6 days | 5 | 3.97 | 5.25 | 6.58 |
| phosphorus (total) | mg/L | every 6 days | 5 | 0.08 | 0.12 | 0.15 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| zinc | ug/L | monthly | 1 | _ | _ | 19 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|--|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result | |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | _ | _ | 100 | |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 2 | 6 | |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 | |

Average and percentile limits are only applied annually for routine monitoring data in Table 2

North Richmond Wastewater Treatment Plant August Pollution Monitoring Summary



EPL 190

Summary period: 01-08-2019 to 31-08-2019 Licensee: Sydney Water Corporation

Date obtained: 06-09-2019 PO Box 399

Date published: 16-09-2019 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | |
|--|--|---------|----|----|-----|--|--|
| pollutant | unit of sampling measure frequency 3DGM limit 3DGM Actual within limits | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | |
| total suspended solids | mg/L | monthly | 40 | <2 | yes | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | _ | 307 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | - | _ | 5.6 |
| cyanide | ug/L | monthly | 1 | - | _ | <5 |
| diazinon | ug/L | monthly | 1 | - | _ | <0.1 |
| iron | ug/L | monthly | 1 | _ | _ | 22 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.96 | 1.19 | 1.34 |
| nitrogen (total) | mg/L | every 6 days | 5 | 7.21 | 7.67 | 7.9 |
| phosphorus (total) | mg/L | every 6 days | 5 | 0.15 | 0.18 | 0.21 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| zinc | ug/L | monthly | 1 | - | - | 30 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|--|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result | |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 100 | |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | <1 | <1 | |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 | |

Average and percentile limits are only applied annually for routine monitoring data in Table 2

North Richmond Wastewater Treatment Plant July Pollution Monitoring Summary



EPL 190

Summary period: 01-07-2019 to 31-07-2019 Licensee: Sydney Water Corporation

Date obtained: 07-08-2019 PO Box 399

Date published: 17-08-2019 PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | | |
|--|--|---------|----|----|-----|--|--|
| pollutant | unit of sampling measure frequency 3DGM limit 3DGM Actual within limits | | | | | | |
| carbonaceous biochemical oxygen demand | mg/L | monthly | 30 | <2 | yes | | |
| total suspended solids | mg/L | monthly | 40 | <2 | yes | | |

³ Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

| EPA Point 4 Site code NR0004 | Point description: Downstream of the weir from the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|----------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | _ | 368 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | - | _ | 6 |
| cyanide | ug/L | monthly | 1 | - | _ | <5 |
| diazinon | ug/L | monthly | 1 | - | _ | <0.1 |
| iron | ug/L | monthly | 1 | _ | _ | 21 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.81 | 0.91 | 1.04 |
| nitrogen (total) | mg/L | every 6 days | 5 | 6.64 | 7.09 | 7.65 |
| phosphorus (total) | mg/L | every 6 days | 5 | 0.13 | 0.15 | 0.17 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | 4 |
| zinc | ug/L | monthly | 1 | - | - | 31 |

| EPA Point 5 Site code NR0005 | Point description: Outlet of the disinfection facilities | | | | | |
|--|--|-----------------------|-------------------|-------------------|----------------|-------------------|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| Ceriodaphnia dubia immobilisation (EC50) | % Effluent/Vol | monthly | 1 | - | _ | 100 |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 1 | 3 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | _ | <30 |